Application No. 09/678,783
October 6, 2004
Reply to office action of July 6, 2004

Amendments to the Specification

Please amend the paragraph beginning on line 20 of page 15 and ending on line 1 of page 16 as follows:

More specifically, using known methods, such as ~~those~~ discussed in ~~the~~ Canadian ~~application~~Patent No. 2,196,133 ~~and in US application serial no. 09/599,963, the disclosure of which are incorporated herein by reference~~, whereby a method of analyzing a communication network comprising determining a mean drop rate in a device x by polling each device from a network management computer (NMC) which is in communication with the network, and processing signals in the NMC to determine a drop rate D(x), in accordance with: D(x) = ((L+(x)-L-(x))/2, and L(x) = 1-A(x) where A(x): the fraction of poll requests from the NMC to device x for which the NMC receives replies (measured over the last M sampling periods), (wherein x must not be broken), D(x): the mean frame drop rate in device x, L(c): NMC's perception of the loss rate to device x and back, L-(x): the NMC's perception of the mean value of L(z) for all devices z connected to device x, closer to the NMC than device x and which are not broken, and L+(x): the NMC's perception of the mean value of L(z) for all devices z connected to device x, further away from the NMC than device x and which are not broken is disclosed, the end to end performance of a path can be easily found. One possible performance measure for a path is the end to end transmission fraction over a specific path. This measures what fraction of packets are actually transmitted from a source to a destination. If we define D(i) as the drop rate on a device (if D(A)=0.12, this means 12% of packets are lost while transmitting through device A) and T as the end to end transmission fraction over a path from the object 1-N, then

$$T = \prod_{i=1..N}(1 - D(i))$$